## For receiving Office use only International Application No. International Filing Date The undersigned requests that the present Name of receiving Office and "PCT International Application" international application be processed according to the Patent Cooperation Treaty Applicant's or agent's file reference (if desired)(12 characters maximum) 890003-2008.WO Box No. I TITLE OF INVENTION ENGINEERED BLOOD VESSELS Box No. II APPLICANT. This person is also inventor. Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) REGENTS OF THE UNIVERSITY OF MINNESOTA Facsimile No. 110 Washington Avenue South Minneapolis, MN 55455 Teleprinter No. Applicant's Registration No. with the Office State (that is, country) of nationality: State (that is, country) of residence: ÚS US This person is applicant all designated states all designated states except the United States of for the purposes of: the United States of the states indicated in America only the Supplemental Box Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: TRANQUILLO, Robert T. applicant only Arden Hills, MN $\boxtimes$ applicant and inventor inventor only (if this check-box is marked, do not fill in below.) Applicant's registration No. with the Office: State (that is, country) of nationality: State (that is, country) of residence: US This person is applicant \_\_\_ all designated all designated states except the United States the United States the states indicated in for the purposes of: of America of America only the Supplemental Box Further applicants and/or (further) inventors are indicated on a continuation sheet. AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE Box No. IV The person identified below is hereby/has been appointed to act on behalf of the agent 2 applicant(s) before the competent International Authorities as: common representative Name and address: (Family name followed by given name; for a legal entity, full official designation

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is

used instead to indicate a special address to which correspondence should be sent. Form PCT/RO/101 (first sheet)(January 2004)

745 Fifth Avenue

United States

The address must include postal code and name of country.)

LAWRENCE, William F.; LEAHY, Amy

Frommer Lawrence & Haug LLP

New York, New York 10151

See Notes to the request form

(212) 588-0800

(212) 588-0500

Telephone No.

Facsimile No.

Teleprinter No.

Agent's registration No. with the Office

## Sheet No. 2

| Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)   |  |   |  |  |  |
|---|--|---|--|--|--|
| If none of the following sub-boxes is used, this sheet should not be included in the request.   |  |   |  |  |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation.   |  | This person is:   |  |  |  |
| The address must include postal code and name of country. The country of the address indicated in this lox is the applicant's State (that is, country) of residence if no State of residence is indicated below.)   |  | applicant only  |  |  |  |
| Ross, Jeffrey<br>Roseville, MN  | ROSS, Jeffrey  |   |  |  |  |
| US  |  | ·   |  |  |  |
| 03  |  | inventor only (if this check-box is marked, do not fill in below.)  |  |  |  |
|   |  |   |  |  |  |
|   |  | Agent's registration No. with the Office  |  |  |  |
| ate (that is, country) of nationality:  US  State (that is, country) of residence: US  US   |  |   |  |  |  |
| This person is applicant all designated all designated states e for the purposes of: states of America  | scept the United States  | the United States the states indicated in the Supplemental Box  |  |  |  |
| Name and address: (Family name followed by given name; for a legal entity   |  | This person is:   |  |  |  |
| The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)   |  | applicant only  |  |  |  |
| REYES, Morayma  |  | applicant and inventor  |  |  |  |
| Seattle, WA   |  | applicant and inventor  |  |  |  |
|   | Turberte victoria  | inventor only (if this check-box is marked, do not fill in below.)  |  |  |  |
|   |  |   |  |  |  |
| :   |  | Agent's registration No. with the Office  |  |  |  |
| State (that is, country) of nationality: US   | State (that is, country) o   | f residence:  |  |  |  |
| This person is applicant all designated all designated states e   |  | the United States the states indicated in the Supplemental Box  |  |  |  |
| for the purposes of: states of America of America only the Supplemental Box  Name and address: (Family name followed by given name; for a legal entity, full official designation. This person is:  |  |   |  |  |  |
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## Sheet No. 3

| Box No. V DESIG  | NATIONS  | <u> </u>  |   |  |  |
|--|--|---|---|--|--|
|  |  | designation of all Contracting Sapplicable, for the grant of both   |   | international filing date,                     |  |
| However,   |  |   |   |  |  |
| DE Germany is not designated for any kind of national protection   |  |   |   |  |  |
| KR Republic of Korea is not designated for any kind of national protection   |  |   |   |  |  |
| RU Russian Federation is not designated for any kind of national protection  |  |   |   |  |  |
| l .  |  | ably) the designations concer   | mad in addan a analdisha aa             | anima of the effect under                      |  |
| the national law, of an earl   | lier national application from                                 | which priority is claimed. S  | ee the Notes to Box No. V               | as to the consequences of                      |  |
|  | in these and certain other States                              |   |   |  |  |
| Box No. VI PRIOF   | UTY CLAIM  |   |   |  |  |
| The priority of the following  | earlier application(s) is hereby c                             | laimed:   |   |  |  |
| Filing date of earlier application   | Number   | Where earlier application is:   |   |  |  |
| (day/month/year)   | of earlier applications  | national application:<br>country or member of WTO   | regional application: * regional Office | international application:<br>receiving Office |  |
| item (1) 1 July 2003   | 601404 563   | 170   |   |  |  |
| (01.07.2003)   | 60/484,563   | US  |   |  |  |
| item (2) 2 July 2003   |  |   | •                                       |  |  |
| (02.07.2003)   | 60/484,595   | US  |   |  |  |
| item (3)   | en e                       |   |   |  |  |
| ☐ Further priority claims a  | re indicated in the Supplementa                                | l Box.  |   |  |  |
| The receiving Office is req  | uested to prepare and transm                                   | nit to the International Bureau   | u a certified copy of the ea            | rlier application(s)(only                      |  |
| if the earlier application was   | filed with the Office which for                                | or the purposes of this intern  | ational application is the rec          | eiving Office) identified                      |  |
| above as:  | `  |   |   | 1.1.1.1  |  |
| all items 🔲 item (   | 1) 🔲 item (2)  | item (3)  | em (4)                                  | other, see                                     |  |
|  | •  |   |   | Supplemental Box                               |  |
| * Where the earlier applica<br>Industrial Property or one Me   | tion is an ARIPO application<br>imber of the World Trade Organ | indicate at least one countrication for which that earlier a  | y party to the Paris Conven             | tion for the Protection of<br>(b)(ii)):        |  |
|  |  |   |   |  |  |
| Box No. VII INTER  | NATIONAL SEARCHING A   | UTHORITY  | <u> </u>                                |  |  |
| Choice of International Sea  | <u> </u>   | wo or more International S  | earching Authorities are con            | npetent to carry out the                       |  |
| unernanonar search, maicare  | me Audiority Glosen, the two-it                                | ener code may be used).   |   |  |  |
| 154/ NO  | • •  |   |   | ,  |  |
| ISA/ US  | andles described as formers to                                 | that search (If an earlier se   |   | 1  |  |
| International Searching Author   |  | that search (if an earner se  | earch has been carried out              | by or requested from the                       |  |
| Date (day/month/year)  | Numb   | per   | Country (or                             | regional Office)                               |  |
|  | · · · · · · · · · · · · · · · · · · ·                          | e de la composición de la composición<br>La composición de la |   | <u> </u>                                       |  |
| Box No. VIII DECL  | ARATIONS   | **** *  |   |  |  |
| The following declarations are contained in Boxes Nos. VIII.(i) to (v) (mark the applicable Number  (Check Boxes below and indicate in he right column the number of each type of Declaration) of declarations |  |   |   |  |  |
| Box No. VIII (i)   | Declaration as to the identity                                 | of the inventor   | :·                                      |  |  |
| Box No. VIII (ii)  Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent  |  |   |   |  |  |
| Box No. VIII (iii)  Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application   |  |   |   |  |  |
| Box No. VIII (vi)  Declaration of inventorship (only for the purposes of the designation of the United States of America):   |  |   |   |  |  |
| Box No. VIII (v) Declaration as to non-prejudicial disclosures or exceptions to lack of novelty:   |  |   |   |  |  |
| Form PCT/RO/101 (third sheet) (Jar   |  | <del></del>   |   | ee Notes to the request form                   |  |

## Sheet No. 4

| Box No. IX CHECK LIST; LANGUAGE OF FILING  |  |  |  |  |
|--|--|--|--|--|
| This international application contains:  (a) the following number of sheets in paper form:  | This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):   | Number of items  |  |  |
| sheets in paper form:  request (including declaration sheets)  | 1.   | . I  |  |  |
| tables related thereto<br>(for both, actual number of<br>sheets if filed in paper form,<br>whether or not also filed in  | or other biological material  9. sequence listing in computer readable form (indicate also type number of carriers (diskette, CD-ROM, CD-R or other))  | ing in the state of the state |  |  |
| computer readable form; see (c) below)  Total number of sheets 71  (b)  only in computer readable form   (Section 801(a)(i))   (i)  sequence listings   (ii)  tables related thereto  c)  also in computer readable form   (Section 801(a)(ii))   (i)  sequence listings   | (i) copy submitted for the purposes of international search Rule 13ter only (and not as part of the international app  (ii) (only where check-box (b(l)) or (c)(l) is marked in left c additional copies including, where applicable, the copy purposes of international search under Rule 13ter  (iii) together with relevant statement as to the identity of the copies with the sequence listing part mentioned in left c (indicate type and number of carriers)  (i) copy submitted for the purposes of international search Section 802(b-quarter) only (and not as part of the international search sear | lication) :  column)  for the  copy or  column  strings  |  |  |
| (ii) tables related thereto  Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are Contained the sequence listings tables related thereto (additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)  Figure of the drawings which should accommany the abstract. | application)  (ii)  (only where check-box (b(ii) or (c)(ii) is marked in left and additional copies including, where applicable, the copy purposes of international search under Section 802(b-quark) together with relevant statement as to the identity of the copies with the sequence listing part mentioned in left content (specify):  Language of filing of the international application: English  | for the carter) : copy or  |  |  |
| Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE   |  |  |  |  |
| Next to each signature, indicate the name of the person signing and the capacity in which the person signed (if such capacity is not obvious from reading the request).  For receiving Office use only   |  |  |  |  |
| Date of actual receipt of the purported  |  | 2. Drawings:   |  |  |
| international application:  3. Corrected date of actual receipt due to later butimely received papers or drawings completing the purported international application:  4. Date of timely receipt of the required corrections under PCT Article 11 (2):  5. International Searching Authority                     |  | received:  |  |  |
| (if two or more are competent): ISA/   | until search fee is paid.  |  |  |  |
| Date of receipt of the record copy by the International Bureau:  | For International Bureau use only  |  |  |  |
| Form PCT/RO/101 (last sheet)( January 2004)  |  | See Notes to the request form.   |  |  |

This sheet is not of and does not count as a sheet of the internation application.

|  | For receiving office use only      |  |  |  |
|--|------------------------------------|--|--|--|
| PCT FEE CALCULATION Annex to the Request   | International application no.      |  |  |  |
| Applicant's or agent's file reference 890003-2008.WO   | Date stamp of the receiving Office |  |  |  |
| Applicant REGENTS OF THE UNIVERSITY OF M   | INNESOTA                           |  |  |  |
| CALCULATION OF PRESCRIBED FEES   |                                    |  |  |  |
| 1. TRANSMITTAL FEE   | \$300.00 T                         |  |  |  |
| 2. SEARCH FEE  | \$1,000.00 S                       |  |  |  |
| International search to be carried out by <u>US</u> (If two or more International Searching Authorities are competent to carry out the international search, indicate the name of the Authority which is chosen to carry out the international search.)  | sional<br>earch.)                  |  |  |  |
| 3. INTERNATIONAL FILING FEE  |                                    |  |  |  |
| Basic Fee Where items (b) and/or (c) of Box No. IX apply, enter Sub-Total number of Where items (b) and (c) of Box No. IX do not apply, enter Total number of the sub-Total nu | of sheets 3 71 (sheets 3 71)       |  |  |  |
| i1 first 30 sheets   | 134.00 i1                          |  |  |  |
| [i2] 41 x \$12.00 = 492  | .00 i2                             |  |  |  |
| number of sheets in excess of 30 fee per sheet   |                                    |  |  |  |
| additional component (only if sequence listings and/or tables related thereto are filed in computer readable form under Section 801(a)(i), or both in that form and on paper, under Section 801(a(ii)):  | i3                                 |  |  |  |
| fee per sheet  |                                    |  |  |  |
| Add amounts entered at i1, i2 and i3 enter total at I  | 1,626.00                           |  |  |  |
| (Applicants from certain States are entitled to a reduction of 75% of the international fee. Where the applicant is (or all applicants are) so entitled, the total to be entered at I is 25% of the sum of the amounts entered at B and D.)  |                                    |  |  |  |
| 4. FEE FOR PRIORITY DOCUMENT (if applicable)   | \$40.00 P                          |  |  |  |
| 5. TOTAL FEES PAYABLE  | \$2,966.00                         |  |  |  |
| Add amounts entered at T, S, I and P, and enter total in the TOTAL box   | TOTAL                              |  |  |  |
|  | sh coupons                         |  |  |  |
| deposit account (see below)  cheque bank draft re  | venue stamps other (specify):      |  |  |  |
| AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT  (This mode of payment may not be available at all receiving Offices)  |                                    |  |  |  |
|  | Deposit Account No.: 50-0320       |  |  |  |
| Authorization to charge the total fees indicated above.  | Date: 1 July 2004                  |  |  |  |
| (This check-box may be marked only if the conditions for deposit ac receiving Office so permit) Authorization to charge any deficiency coverpayment in the total fees indicated above.   |                                    |  |  |  |
| Authorization to charge the fee for priority document.   | Signature:                         |  |  |  |